



U. S. ARMY ARMAMENT RESEARCH, DEVELOPMENT AND ENGINEERING CENTER

Logistics Research and Engineering Directorate Battlefield Tools & Equipment Division

DESCRIPTION FOR PURCHASE DFP- 589C

[INCH-POUND]

Shop Set, Spare Parts Storage for Field Maintenance, Set No. 1

NSN 4940-01-592-5878

AMSC N/A FSC 4940

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1 Scope

1.1 Scope.

This description for purchase describes a Spare Part Storage Set consisting of a total of eight (8) transportable storage cabinets. This set will enable Army maintenance personnel to maintain a compact, organized stock of spare parts while mounted in tactical trucks and semi-trailers, which can be transported to the Theater of Operations when their unit is deployed.

2 Applicable Documents.

2.1 General.

The documents listed in this section are specified in sections 3, 4 and 5 of this specification. This section does not include documents cited in other sections of this specification or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3, 4 and 5 of this specification, whether or not they are listed.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be used in improving this document should be addressed to: HQ ARDEC, RDAR-EIL-TC, Bldg 62 2nd Floor SWC, Rock Island IL 61299-7300.

2.2 <u>Government Documents.</u>

2.2.1 Specifications, standards and handbooks.

The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are the most current revisions as of the date of issue for this DFP as listed in ASSIST and supplement thereto, cited in the solicitation (see paragraph 6.2).

SPECIFICATIONS

FEDERAL

A-A-50271	Plate, Identification
A-A-59486	Padlock Set (Individually keyed or keyed alike)

STANDARDS

DEPARTMENT OF DEFENSE

MIL-STD-129P	Military Marking for Shipment and Storage
MIL-STD-130	Identification Marking of U.S. Military Property
MIL-STD-209	Interface Standard for Lifting and Tiedown Provisions
MIL-STD-810	Environmental Engineering Considerations and Laboratory Tests
MIL-STD-1916	DoD Preferred Methods for Acceptance of Product
MIL-STD-2073-1D	Standard Practice for Military Packaging

(Unless otherwise indicated, copies of the above specifications, standards, and handbooks are available from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094).

2.2.2 <u>Other Government documents, drawings and publications.</u>

The following other Government documents, drawings, and publications form a part of this document to extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation.

DRAWINGS

NONE

DFARS

(Defense Federal Acquisition Regulation Supplement)

Clause 252.211-7003	Item Identification and Valuation
Clause 252.211-7006	Radio Frequency Identification

2.3 Non-Government Publications.

The following document(s) form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents that are DoD adopted are those listed in the issue of the DoDISS cited in the solicitation. Unless

otherwise specified, the issues of documents not listed in the DoDISS are the issues of the documents cited in the solicitation (see paragraph 6.2)

ANSI

(American National Standards Institute)

Z535.4 Product Safety Signs and Labels

ASTM

(American Society for Testing Materials)

D4169 Standard Practice for Performance Testing of

Shipping Containers and Systems

ISO (International Standard)

ISO/IEC 16022 Information Technology - Automatic identification

and data capture techniques - Data Matrix bar code

symbology specification

2.4 <u>Order of precedence</u>.

In the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3 Requirements.

3.1 Product Verification.

When specified, the contractor shall furnish one or more sets for a product verification inspection. The sets submitted shall be in accordance with all requirements of this Specification. The approved product verification sample and all items shall be in accordance with the terms of the contract. Approval of the product verification sample shall not relieve the contractor of the responsibility to furnish equipment in accordance with the requirements of this Purchase Description. All items supplied under this contract shall be identical to the product verification sample; including packaging requirements listed in Section 5.

3.2 Illustrations.

Illustrations are provided for information only. All illustrations are created and maintained by the Government.

3.3 <u>Industrial quality</u>.

All components supplied in this set shall be industrial quality. For the purposes of this procurement, the term "industrial quality" versus household-use or general purpose components are defined as items commercially marketed and manufactured for constant, rigorous, industrial or professional environment use, and that have demonstrated market acceptance. Industrial quality components are used primarily by skilled professionals and technicians in such areas as machine shops, automotive maintenance and repair facilities, aircraft maintenance and repair facilities, industrial automotive assembly plants, fleet maintenance facilities, and airline service facilities. The components will be used for specialized applications in an environment of virtual constant use, (i.e. aroundthe-clock 8 hour shifts), with applications requiring high torque, low slippage, and strict tolerances. Industrial quality is demonstrated by evidence of substantial sales to industrial customers. Advertising or marketing literature that indicates "professional grade" or "industrial quality", or merely stating that a component is "professional grade" or "industrial quality" is insufficient to establish industrial/professional quality since these are marketing terms for which there is no generally acceptable definition. A claim that a component is manufactured to an industry consensus standard is also insufficient to establish industrial or professional quality. Industrial/professional quality components shall have verifiable marketplace acceptance.

3.3.1 Warranty.

All components shall be warranted as stated in Table 1. The offeror shall state the length and terms of the manufacturers' warranties in response to the solicitation. The warranties shall become part of the contract or delivery order.

3.3.2 Brand name or Equal.

The items identified in Table 1 shall be offered as either Brand Name or Equal. Each component listed contains manufacturer's part numbers for reference. Dimensional constraints are attributable to interface and replacement storage cabinet restrictions.

Brand Name or Equal products shall be provided. If an equal product is provided the product shall comply with the Salient

Characteristics of the component tools which refers to: A. Compliance with applicable commercial item descriptions (see 3.5 through 3.15), B. Compliance with Industrial Quality definition as defined in 3.3 and C. Compliance with Individual dimensions outlined in 3.5.1 through 3.5.3.

3.4 Quantities.

The Spare Parts Storage for Field Maintenance Shop Set No. 1 shall be furnished with the types and quantities of cabinets as stated in the "QTY" column of Table 1.

3.5 <u>Components</u>.

The Spare Parts Storage for Field Maintenance Shop Set No. 1 shall be furnished with the components and corresponding quantities as stated in Table 1 below. The components shall comply with all requirements stated in Section 3 herein.

Table 1

No.	Nomenclature	QTY*	WTY**	FSC***	Part Number	Manufacturer
3.5.1	Cabinet, Storage, Shelves	1	M	7125	RP1966AL	Stanley Works
3.5.2	Cabinet, Storage, 6 drawers	5	M	7125	RP1965AL	Stanley Works
3.5.3	Cabinet, Storage, 7 drawers	2	M	7125		

*QTY: quantity
**WTY: warranty

N - No warranty

M - Manufacturer's warranty

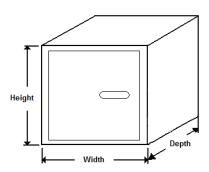
L - Lifetime warranty

***FSC: Federal Supply Class

3.5.1 Cabinet, Storage, Shelves.

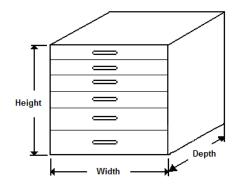
The storage cabinet shall be 30 inches wide by 21-3/8 inches deep by 37 inches high with a tolerance on all dimensions of \pm 1/16 inches. The cabinet shall feature one exterior door that is hinged on the left side with a piano hinge. The right side of the cabinet shall feature a magnetic catch to keep the left-handed door closed. The door shall feature a handle with a means to attach identifying labels with protective covers. The interior shall feature at least two adjustable shelves capable of containing at least 400 pounds each. Each shelf shall be equipped with three (3) 9-inch \pm 0.5 inches tall upright dividers. The cabinet shall feature a hinge lock bar capable of locking the cabinet door with a padlock with a maximum shackle diameter of 0.385 inches. The hinge lock bar shall be capable of

keeping the cabinet door closed during transport. The cabinet shall be capable of being securely stacked using standard hardware and tools. The cabinet shall be equipped with provisions to accommodate a forklift fork two inches thick. The storage cabinet shall be painted tan or beige in color.



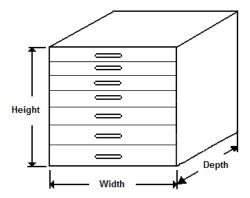
3.5.2 <u>Cabinet, Storage, 6 drawers.</u>

The storage cabinet shall be 30 inches wide by 21-3/8 inches deep by 37 inches high with a tolerance on all dimensions of $\pm 1/16$ inches. The cabinet shall feature six drawers that vary in size and are arranged with the smallest interior height on top and increasing to the largest on the bottom. The top two drawers shall feature a usable interior height of 3 inches and shall be compartmentalized with dividers installed creating 36 equally spaced compartments. The next two drawers shall have a usable interior height of 3-7/8 inches and shall be compartmentalized with dividers installed creating 30 equally spaced compartments. The bottom two drawers shall have a usable interior height of 6-1/4 inches and shall be compartmentalized with dividers installed creating 12 equally spaced compartments. All dividers used in the drawers shall be capable of being adjusted if necessary. All drawers shall be provided in accordance with the requirements stated in paragraph 3.6. The cabinet shall feature a hinge lock bar capable of locking all drawers with a padlock with a maximum shackle diameter of 0.385 inches. The hinge lock bar shall be capable of keeping all drawers closed during transport. The cabinet shall be capable of being securely stacked using standard hardware and tools. The cabinet shall be equipped with provisions to accommodate a forklift fork two inches thick. The storage cabinet shall be painted tan or beige in color.



3.5.3 <u>Cabinet, Storage, 7 drawers.</u>

The storage cabinet shall be 30 inches wide by 21-3/8 inches deep by 33 inches high with a tolerance on all dimensions of $\pm 1/16$ inches. The cabinet shall feature seven drawers that vary in size and are arranged with the smallest interior height on top and increasing to the largest on the bottom. The top three drawers shall feature a usable interior height of 2-1/4 inches and shall be compartmentalized with dividers installed creating 36 equally spaced compartments in each drawer. The fourth drawer shall feature a usable interior height of 3 inches and shall be compartmentalized with dividers installed creating 30 equally spaced compartments. The last three drawers (5-7) shall feature a usable interior height of 3-7/8 inches and shall be compartmentalized with dividers installed creating 12 equally spaced compartments in each drawer. All dividers used in the drawers shall be capable of being adjusted if necessary. All drawers shall be provided in accordance with the requirements stated in paragraph 3.6. The cabinet shall feature a hinge lock bar capable of locking all drawers with a padlock with a maximum shackle diameter of 0.385 inches. The hinge lock bar shall be capable of keeping all drawers closed during transport. The cabinet shall feature a butcher block top and shall be equipped with provisions to accommodate a forklift fork two inches thick at the bottom. The storage cabinet shall be painted tan or beige in color.



3.6 Drawers.

When drawers are required, as specified in item descriptions 3.5.2 and 3.5.3, they shall be supplied in accordance with the following:

- (1) Double hung.
- (2) Provided with fronts that have means to attach identifying labels with protective covers.
- (3) Equipped with a manual lock-in/lock-out device.
- (4) The partitions and the inside perimeter of each drawer shall be provided with slots or other devices that permit the position of partitions and dividers to be adjusted in increments of 1 inch or less. The drawer partitions and dividers shall be equal in height to the sidewalls of their respective drawers. Although the partitions and dividers are adjustable, the cabinets shall be delivered with the partitions and dividers installed in each drawer based on the respective requirements in the item descriptions (3.5.2 and 3.5.3).
- (5) Equipped with glides that incorporate ball or roller bearings or equally effective friction-reducing devices.
- (6) Provided with a means to easily open drawers (such as a handle or recessed pull).
- (7) Constructed of materials sufficient to support a weight of no less than 400 pounds per drawer without permanent deformation of the cabinet.

3.7 Cabinet construction.

The cabinets shall be new and constructed of parts and materials that are without defects. Each cabinet shall be delivered assembled so that the cabinet can be immediately used for its intended purpose.

3.7.1 Materials.

Unless otherwise specified herein, the cabinet shall be made of metal or any other suitable material that will meet all of the requirements set forth in this specification.

3.7.2 Finish.

Metal parts of the cabinets shall be painted or plated on all surfaces, inside and out, to prevent corrosion. The exterior surface finish shall be clean, corrosion resistant and shall have no sharp edges or projections.

3.8 Workmanship.

The quality of workmanship imparted to the cabinet shall equal or exceed that typically provided to domestically manufactured commercial cabinets. The cabinets presented for acceptance shall have been manufactured with skill and care; shall be uniform, neat, and clean; and shall be free from irregularities and anomalies which degrade form, fit, function, performance or appearance.

3.9 Plates and labels.

All plates and labels other than those on the drawer handles (see 3.6) and the door handle (see 3.5.1) shall be permanently affixed to the cabinets. They shall be resistant to deterioration caused by heat, cold, solar radiation, water, and petroleum products to the extent that they will remain intact and readily legible for the expected economic life of the storage set. Marking shall be accomplished in a manner that does not adversely affect the life and utility of the cabinets. All plates and labels shall be printed in the English language, and may be supplemented by graphical symbols.

3.9.1 Item Identification.

Each chest shall have a data plate permanently and legibly marked with the following information, including all information required to be inserted in the blanks indicated:

- a. End Item Nomenclature: SHOP SET, SPARE PARTS STORAGE: FIELD MAINTENANCE, SET NO. 1
- b. End Item LIN: T36305
- c. End Item NSN: 4940-01-592-5878
- d. End Item Serial No.: *
- e. Cabinet of 8
- f. Specification Data: TACOM-ARDEC DFP 589
- g. Manufacturer: CAGE or NSCM and PIN **
- h. Acquisition instrument identification number: **

*Format optional

**See definitions in Section 6

The data plate shall conform to A-A-50271, Composition A, Class 2 or Composition D, and contain the data described herein. The item identification plate shall be placed in a location on the exterior of the cabinet that is plainly visible when the cabinet has been closed and locked in preparation for shipment.

3.9.2 Shipping data.

Shipping markings and labels shall be provided in accordance with Section 5 of this DFP.

3.10 Environment.

3.10.1 Operational environment.

The storage set will be deployed worldwide to locations having climatic design types hot, basic, and cold as defined by MIL-STD-810. Although the cabinets will be kept under cover in a tactical truck or semi trailer, and will not be directly exposed to the weather elements, they shall be capable of withstanding, without deformation, the temperature ranges defined by climatic design types hot, basic and cold as defined by Table C-I of MIL-STD-810.

3.10.2 Corrosion protection.

Metal parts of the cabinets shall be painted or plated on all surfaces, inside and out, to prevent corrosion (see 3.7.2).

3.11 Padlocks.

Each storage cabinet shall be provided with corresponding padlocks for each hinge lock bar supplied. The padlocks shall be key-operated, tumbler type padlocks with double dead bolt locking construction. The padlock shall be solid steel with a hardened steel, u-shaped shackle. The padlock body (not including the shackle) shall be 1.65-1.85 inches wide by 1.25-2.00 inches high by 0.688-0.820 inches thick. The padlock shall feature a non-removable key when unlocked and shall be furnished with two keys per lock. The padlock shall be supplied in accordance with CID A-A-59487. The number of locks required to secure each storage container shall not exceed two (2). The set of locks for each cabinet supplied in the Spare Parts Storage for Field Maintenance Shop Set No. 1

shall be keyed alike, and the keys used for one set shall not work for any other set. No master or grand master keys shall be provided.

3.11.1 Anti-tampering measures.

When prepared for transport, the padlocks on the cabinets shall be plainly visible when installed. It shall not be possible to remove any of the items stored in the cabinets without either removing the locks or visibly damaging the cabinets.

3.12 Safety.

The storage set shall not present any uncontrolled safety or health hazards throughout the life cycle of the cabinets. The storage set shall incorporate the following features to assure safe operation.

3.12.1 Physical hazard control.

Mechanical guards and other safety devices shall be provided to protect operators from inadvertent physical hazards. Exposed sharp corners and sharp edges on cabinet parts shall be eliminated if they serve no functional purpose. Hazards that cannot be eliminated and cannot be controlled by protective devices shall be properly identified and labeled in accordance with ANSI Z535.4.

3.12.2 <u>Cabinet restraints.</u>

Each cabinet base shall be provided with mounting features such as pre-drilled holes so that the cabinet can be fastened to the cargo deck of a tactical truck or semi-trailer. The mounting features must be readily accessible from the front of the cabinet; temporary removal of drawers and shelves to facilitate mounting is permissible. The number and mechanical strength of the mounting features shall be sufficient to restrain the fully loaded cabinets without damage to the cabinet bases when subjected to the shock and vibration of commercial transport and cross-country travel.

3.13 <u>Transportability.</u>

When closed, locked, and mounted in its dedicated transport vehicle, the fully loaded storage set shall be suitable for commercial shipment via air, sea, rail, and highway; and for the ground mobile environment in Theaters of Operation where roads, if any, are likely to be in very poor condition.

3.14 Durability.

The storage set shall have a projected economic life of not less than ten years.

3.15 <u>Unique Item Identification (UII or UID)</u>.

In addition to the requirements of DFARS clause 252.211-7003, when the cost of the complete set (8 storage cabinets) exceeds an amount of \$5000, each set shall be marked with a unique item identifier that has machine-readable data elements that will distinguish it from all other like and unlike items. Each unique item identifier shall be globally unique and unambiguous. The UID data elements shall be contained in a 2D (2-dimensional) Data Matrix symbol with Error Correction Code (ECC) 200 symbol in accordance with ISO/IEC 16022. Any individual component within this set for which the cost to the Government exceeds \$5000 shall also be marked with a unique item identifier. Markings shall conform to MIL-STD-130. The identifier shall remain intact and readily human and machine readable for the expected life of the set. The unique item identifier shall not be repeated during the life of the contract. If construct number 2 is used (serialization within the original part number of the enterprise), the contractor shall maintain the original part number on the item for the life of the item (see "Department of Defense Guide to Uniquely Identifying Items: Assuring Valuation, Accountability and Control of Government Property", Version 1.4). Further guidance on unique item identification may be found at http://www.acq.osd.mil/dpap/Docs/uid/guide_1_4.pdf and http://www.acq.osd.mil/dpap/pdi/uid/index.html.

The 2D data matrix symbol shall not only contain information relating to a unique item identification number but shall also include the following information:

NSN: 4940-01-592-5878 Spare Parts Storage Shop Set Consists of 8 cabinets

4 VERIFICATION

4.1 <u>General Provisions.</u>

The product verifications and conformance inspections stated herein shall be performed to determine whether the item conforms to Section 3 of this Description for Purchase. Unless otherwise specified in the contract, all verifications and inspections shall be performed in accordance with the conditions specified herein. The contractor is responsible for the performance of all product verifications and conformance inspections specified herein. The contractor may use his own or any other facilities suitable for the performance of the verifications and inspections, unless disapproved by the Government. The Government reserves the right to perform any of the verifications and inspections set forth in this DFP, at a later date and in its own facilities, where such verifications and

inspections are deemed necessary to assure supplies and services conform to prescribed requirements.

4.1.1 Classification of Inspections.

The inspection requirements specified herein are classified as follows:

- a. Product performance verification (see 4.2)
- b. Conformance inspection (see 4.3)

4.2 <u>Product Performance Verification.</u>

Product performance verification is performed before full production begins and is intended to verify that the product is designed and manufactured to meet the requirements of this specification. It includes visual and manual inspections, some of which result in measured or counted values, as well as tests and demonstrations to prove compliance of the tested product and all of its assemblies and subcomponents with the requirements of this specification. It also includes the product conformance inspections, as described in paragraph 4.3, that will be performed during production to prove that all inspected characteristics are in compliance at the beginning of production. Product submittal, inspections and acceptance criteria are as follows:

- a. <u>Submission</u>. The contractor shall submit one or more sets for product verification and conformance inspections. (see 3.1)
- b. <u>Inspections to be performed</u>. As determined by the Government, the set assemblies, components and specimens may be subjected to any or all of the verifications and inspections specified in paragraphs 4.2 and 4.3 herein.
- c. <u>Rejection</u>. If any kit assembly, component or specimen fails to comply with any of the applicable requirements, the entire kit shall be rejected. The Government reserves the right to terminate further verifications and inspections upon any failure of a kit assembly, specimen or component to comply with any of the requirements.

4.2.1 Cabinet Construction Verifications.

Verify that the components of the cabinet meet the requirements of paragraph 3.5, 3.6, 3.7 and all sub paragraphs.

4.2.1.1 Materials.

Verify with objective evidence that the cabinets are made of metal or any other suitable material that meets all of the requirements set forth in this specification. Verify with objective evidence that the cabinets are constructed of parts and materials that are corrosion resistant or suitably processed to resist corrosion. (see 3.7.1)

4.2.1.2 Finish.

Verify the exterior surface finish of each chest is clean, corrosion resistant and has no sharp edges or projections. Verify the cabinet is tan or beige in color. (see 3.5.1, 3.5.2, 3.5.3, 3.7.2)

4.2.1.3 Environment.

4.2.1.3.1 <u>Operational environment</u>.

Examine the storage set for worldwide deployment (cabinets will be mounted under cover in a tactical truck or semi trailer, and will not be directly exposed to the weather), to locations having climatic design type temperature ranges of hot, basic, and cold as defined by Table C-I of MIL-STD-810. Verify the storage set is capable of withstanding, without deformation, the temperature ranges defined by climatic design types hot, basic and cold as defined by Table C-I of MIL-STD-810. (see 3.10.1)

4.2.1.3.2 <u>Corrosion protection</u>.

Confirm that all metal parts of the cabinets are painted or plated on all surfaces, inside and out. (see 3.10.2)

4.2.1.4 <u>Safety.</u>

Examine the storage set for the presence of any uncontrolled safety or health hazards. Determine if the storage set incorporates the following features to assure safe operation. (see 3.12)

4.2.1.4.1 Physical hazard control.

- a. Verify that mechanical guards and other safety devices are provided that protect operators from physical hazards.
- b. Verify there are no exposed sharp corners or sharp edges that serve no functional purpose.

c. Verify that hazards that cannot be eliminated and cannot be controlled by protective devices have been identified to the user by printed warnings or cautions in accordance with ANSI Z535.4.

4.2.1.4.2 Cabinet restraints.

Verify that each cabinet base incorporates readily accessible mounting holes or other features for anchoring the cabinet to the cargo deck of a tactical truck or semi-trailer.

4.2.1.5 Transportability of cabinets.

Demonstrate transportability by repeatedly titling each cabinet model six times forward against the hinge lock bar. Verify the hinge lock bar was capable of keeping the cabinet door and drawers closed on each of the storage cabinets. Verify the cabinets described in 3.5.1 and 3.5.2 are capable of being securely stacked using standard hardware and tools. Verify each cabinet model is equipped with provisions to accommodate a forklift fork two inches thick. (see 3.5.1, 3.5.2, 3.5.3, 3.13)

4.2.1.6 <u>Durability.</u>

The storage set has a projected economic life of not less than 10 years. The contractor shall provide a report detailing this projected economic life. The projection may be made based on historical data regarding the economic life of items having similar design and manufacture, test data, or a combination thereof. Lack of supportive objective evidence in the report shall be cause for rejection. (see 3.14)

4.3 Conformance Inspection.

Conformance inspection shall be applied to the first units inspected at the Product Performance Verification step (see 4.2) and to production units being offered for acceptance under the contract. These inspections shall include all verifications listed under paragraph 4.3 and shall be limited to the examination of product to verify compliance with design requirements established during product performance verification.

4.3.1 Inspection Lot Formation.

Inspection lots shall be formed in accordance with Section 4 of MIL-STD-1916.

4.3.1.1 <u>Sampling Plan Determination.</u>

Sampling inspections shall be conducted in accordance with MIL-STD-1916 using Verification Level I.

4.3.1.2 Rejection.

Failure of any unit to pass any verification shall be cause for rejection of the lot.

4.3.2 Product Examination.

Visually, dimensionally, and manually examine each set to determine conformance with the requirements. Visual examination shall include verification of completeness of manufacture and assembly, proper cleaning, and freedom from the identified defects. Dimensional examination includes measuring dimensions as specified. Manual examinations shall include the operation of movable parts by hand to assure proper functioning. (see 3.5.1 thru 3.5.3)

4.3.3 Workmanship.

Verify the quality of workmanship imparted to the cabinet equal or exceed that typically provided to domestically produced, commercial chests of these types. Verify the sets presented for acceptance have been manufactured with skill and care; uniform, neat, and clean; and free from irregularities and anomalies which degrade form, fit, function, performance or appearance. (see 3.8)

4.3.4 Components and Related Items.

Verify all the components, as listed on Table 1, are provided in the quantities indicated. (see 3.4, 3.5)

4.3.5 <u>Industrial Quality Components.</u>

When required, verify that the components provided conform to industrial standards through substantial evidence of sales to industrial customers. (see 3.3)

4.3.6 Warranty.

Verify that warranties of all components are provided in accordance with manufacturing requirements as specified in the contract. (see 3.3.1)

4.3.7 Plates and Labels.

Verify all identification, warning and instruction plates and labels are permanently affixed to the tool box and contains the information

as described in paragraph 3.9.1, including all information required to be inserted in the blanks indicated. Verify all plates and labels are printed using the English language and may be supplemented by graphical symbols. (see 3.9, 3.9.1, 3.9.2)

4.3.8 Padlocks.

Verify each storage cabinet is provided with corresponding padlocks for each hinge lock bar supplied. Verify the padlocks are key-operated, tumbler type padlocks with double dead bolt locking construction. Verify the padlock is solid steel with a hardened steel, u-shaped shackle, with a body that is 1.65-1.85 inches wide by 1.25-2.00 inches high by 0.688-0.820 inches thick. Verify the padlock features a non-removable key when unlocked and furnished with two keys per lock. Verify the padlock is supplied in accordance with CID A-A-59487. Verify the number of locks required to secure each storage container does not exceed two (2). Verify the set of locks for each Spare Parts Storage for Field Maintenance Shop Set No. 1 are keyed alike, and the keys used for one set does not work for any other set. Verify no master or grand master keys are provided. (see 3.11)

4.3.8.1 Anti-tampering measures.

Examine the padlocks on each cabinet to verify they are plainly visible and the removal of any of the items stored is impossible without either removing the locks or visibly damaging the cabinets. (see 3.11.1)

4.3.9 Packaging.

Verify that unit packaging, unit package markings, shipping containers, shipping container markings, packing lists, quality certification heat treatment markings and unitization requirements are in accordance with Section 5 of this DFP. Failure to comply with the requirements may be cause for rejection.

4.4 Changes to Materials, Processes, or Configuration.

The contracting officer shall be informed of any changes to the materials, processes, or configuration of any characteristic of the units. The contracting officer shall determine if the reported changes to materials, processes, or configuration shall require additional verifications. In addition, the Contracting Officer shall be provided the date of production and the UID number corresponding to when the identified change is to be incorporated.

4.5 Conformance of Subsequent Production Quantity.

All products offered for acceptance throughout the life of the contract shall conform to all of the requirements of the contract. The Government reserves the right to re-verify conformance with requirements, at its own facility and at its own expense, at any time during the life of the contract and return to the contractor for warranty replacement such product that does not conform to the specified requirements.

5 PACKAGING

5.1 Packaging.

Preservation, packaging, packing, unitization and marking furnished by the supplier shall provide protection for a minimum of one year, provide for multiple handling, redistribution and shipment by any mode and meet or exceed the following requirements.

5.1.1 Cleanliness.

Items shall be free of dirt and other contaminants which would contribute to the deterioration of the item or which would require cleaning by the customer prior to use. Coatings and preservatives applied to the item for protection are not considered contaminants. When cleaning is necessary, the cleaning process shall not be injurious to the item and will not remove item surface finish.

5.1.2 Preservation.

Items susceptible to corrosion or deterioration shall be provided protection by means of preservative coatings, volatile corrosion inhibitors, desiccants, waterproof and/or water/vapor-proof barriers.

5.1.3 <u>Cushioning</u>.

Items requiring protection from physical and mechanical damage (e.g. fragile, sensitive, material critical) or which could cause physical damage to other items shall be protected by wrapping, cushioning, pack compartmentalization, or other means to mitigate shock and vibration to prevent damage during handling and shipment. Items of a delicate nature shall not be subjected to damage from rugged items contained within the set. Non-critical items of odd shapes or having sharp protrusions will not damage other items or protective barriers.

5.2 Unit package.

Unit package shall be so designed and constructed that it will contain the contents with no damage to the item(s), and with minimal damage to the unit pack during shipment and storage in the shipping container, and will allow subsequent handling. The outermost component of a unit package shall be a container such as a sealed bag, carton or box.

5.3 Unit package quantity.

Unless otherwise specified, the unit package quantity shall be one each set.

5.4 <u>Intermediate package</u>.

Not applicable.

5.5 Shipping containers.

Unit packages and intermediate packages not meeting the requirements for a shipping container shall be packed in shipping containers. All shipping containers shall be the most cost effective and shall be of minimum cube to contain and protect the items. The shipping container (including any necessary blocking, bracing, cushioning, or waterproofing) shall comply with the regulations of the carrier used and shall provide safe delivery to the destination at the lowest tariff cost. The shipping container shall be capable of multiple handling, stacking at least 10 feet high, and storage under favorable conditions (such as enclosed facilities) for a minimum of one year, and shall be fabricated in accordance with MIL-STD-2073-1.

5.6 Unitization.

Shipments of identical items going to the same destination shall be palletized if they have a total cubic displacement of 50 cubic feet or more unless skids or other forklift handling features are included on the containers. Pallet loads shall be stable, and to the greatest extent possible, provide a level top for ease of stacking. A palletized load shall be of a size to allow for placement of two loads high and wide in a conveyance. The weight capacity of the pallet shall be adequate for the load. The preferred commercial expendable pallet is a 40 x 48 inch, 4-way entry pallet although variations may be permitted as dictated by the characteristics of the items being unitized. The load shall be contained in a manner that will permit safe handling during shipment and storage.

5.7 <u>Marking</u>.

All unit packages, intermediate packs, exterior shipping containers, and, as applicable, unitized loads shall be marked in accordance with MIL-STD-129, Revision P Change Notice 4, dated 19 Sep 2007 including bar coding and a MSL label. Each component unit package shall be marked at a minimum of Part Number, Nomenclature, Quantity and Unit of Issue; however, the Nomenclature shall be omitted from the shipping containers. The contractor is responsible for application of special markings as discussed in the Military Standard regardless of whether specified in the contract or not. Special markings include, but are not limited to, Shelf-life markings, structural markings, and transportation special handling markings. When a set requires two or more shipping containers or palletized loads, each shipping container or palletized load shall be marked (IAW) 5.2.14 of MIL-STD-129P (e.g. 1 of 2, 2 of 2).

Passive RFID tagging is required in all contracts that contain DFARS clause 252.211-7006. Contractors shall check the solicitation and/or contract for this clause. For details and most recent information, see http://www.acq.osd.mil/log/rfid/index.htm for the current DoD Suppliers' Passive RFID Information Guide and Supplier Implementation Plan. If the item has Unique Item Identifier (UII) markings then the UII needs to be 2D bar coded and applied on the unit package, intermediate and exterior containers, and the unit load.

5.8 <u>Hazardous Materials (as applicable)</u>.Not applicable.

5.9 Heat treatment and marking of wood packaging materials.

All non-manufactured wood used in packaging shall be heat treated to a core temperature of 56 degrees Celsius for a minimum of 30 minutes. The box/pallet manufacturer and the manufacturer of wood used as inner packaging shall be affiliated with an inspection agency accredited by the board of review of the American Lumber Standard Committee (ALSC). The box/pallet manufacturer and the manufacturer of wood used as inner packaging shall ensure tractability to the original source of heat treatment. Each box/pallet shall be marked to show the conformance to the International Plant Protection Convention Standard (IPPC). Boxes/pallets and any wood used as inner packaging made of non-manufactured wood shall be heat-treated. The quality mark shall be placed on both ends of the outer packaging, between the end cleats or end battens; on two sides of the pallet. Foreign manufacturers shall have the heat treatment of non-manufactured wood

products verified in accordance with their National Plant Protection Organization's compliance program.

5.10 Quality assurance.

The contractor is responsible for establishing a quality system. Full consideration to examinations, inspections, and tests will be given to ensure the acceptability of the commercial package. All items, packing configurations, and markings supplied under this contract shall be identical to the first article.

5.11 Supplemental Instructions.

Paragraphs 5.1 and 5.2 above apply to each component of the set for unit packaging. A packing list shall be sealed in water-resistant envelopes and secured to the exterior of the load or container in the most protected location.

6 NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

6.1 Intended use.

The Storage Set is intended for Combat Service Support (CSS) operations. The cabinets will be mounted in tactical vehicles for use by personnel engaged in logistic support, maintenance, and repair of military equipment both in garrison and while deployed away from fixed facilities. Travel in the Theater of Operations will primarily be by gravel road, combat (dirt) trail, or expedient road. Cross-country travel will be limited to short distances on fairly smooth and open ground.

6.2 Measurement system.

The US Customary System of Units (US) or the International System of Units (SI) may be used in construction of the TMWSS. In this specification, all measurements, dimensions, sizes, and capacities are given in the US system. These measurements may be converted to the SI system by using the conversion factors and methods specified in ASTM E380.

6.3 Definitions.

6.3.1 Fully loaded.

A storage set is fully loaded when each drawer and shelf contains an evenly distributed load of from ten to 150 lbs, with a mean average load of 50 lbs for each of the shelves and drawers in the set.

6.3.2 Secured cargo.

Secured cargo is cargo that is securely tied or blocked in all three axes with respect to the bed of the transport vehicle.

6.3.3 <u>Acquisition instrument identification number.</u>

The Government acquiring activity's contract or purchase order number.

6.3.4 Part or Identifying Number (PIN).

The identifier assigned by the manufacturer, which uniquely identifies the TMWSS relative to the manufacturer; often a model number or top assembly drawing number.

6.3.5 <u>Commercial and Government Entity (CAGE) Code.</u>

A five-character code which is assigned to commercial and Government activities that manufacturer or develop items, or provide services or supplies to the Government. The CAGE was previously called the manufacturer's code, code identification number, or Federal Supply Code for Manufacturers (FSCM).

6.3.6 NATO Supply Code for Manufacturers (NSCM):

A five-position alpha-numeric code assigned to manufacturers that are located in a country other than the Unites States or Canada, and are a source of supply for items acquired by the Federal Government, NATO member nations, and other participating friendly Governments.

6.4 Subject terms (key word) listing.

Storage

Transportability

Mobility

Sets, Kits, and Outfits (SKO)

Shop Set

6.5 Acronyms in this specification.

The acronyms used in this specification are:

DoD - Department of Defense

DoDISS - Department of Defense Index of Specifications and Standards

LIN - Line Item Number

NSN - National Stock Number